

REMARKS

Claims 1-9 are pending in this application. Claims 7-9 are withdrawn from further consideration.

The Examiner stated that the declaration was defective because one of the names (Ikuo Takemura) on the declaration did not match the corresponding name on the Application Data Sheet (ADS). The name on the declaration is correct. Applicants submit concurrently herewith a Supplemental ADS to correct this error.

The Examiner objected to the disclosure because of an informality on page 3 of the specification. Applicants have amended the specification to correct this informality.

The Examiner rejected claims 2-5 under 35 USC 112, second paragraph, as being indefinite. Applicants have amended claims 3-5 to overcome this rejection. However, applicants respectfully submit that claim 2, as originally presented, recites "lower end of the suction nozzle" and was therefore not indefinite. Additionally, and with respect to claim 5, applicants agree with the Examiner's point that the lower end of the suction nozzle cannot be measured if the nozzle is missing. In amended claim 5, a vertical position is still measured by the position sensor: outputs of the line sensor unit 96 are used by CPU 93 to provide the vertical position. However, it will be a vertical position resulting from the device absent the suction nozzle. In other words, such a vertical position, if higher than a predetermined position, simply means that the suction nozzle is missing.

The Examiner rejected claims 1 and 4 under 35 USC 102(b) as being anticipated by Takeuchi U.S. Patent No. 5,661,239; claims 1, 5 and 6 under 35 USC 102(b) as being anticipated by Okuda U.S. Patent No. 6,868,603; and claims 1-3 and 6 under 35 USC 102(b) as being anticipated by Kano U.S. Patent No. 5,539,977. Applicants respectfully traverse these rejections.

Applicants' claim 1, as amended, recites an electronic component mounting apparatus comprising a component feeding unit feeding an electronic component, a suction nozzle picking up the electronic component from the component feeding unit and mounting the electronic

component on a printed board and a position sensor measuring a vertical position of a lower end of the suction nozzle after the suction nozzle releases the electronic component to the printed board and before the suction nozzle picks up the next electronic component from the component feeding unit.

The combination of elements defined by applicants' claims is neither disclosed nor suggested in Takeuchi, Okuda or Kano, viewed alone or in combination.

First, Takeuchi does not disclose the claimed position sensor measuring a vertical position of a lower end of the suction nozzle after the suction nozzle releases the electronic component to the printed board and before the suction nozzle picks up the next electronic component from the component feeding unit. Takeuchi merely discloses an electronic part mounting apparatus where an excessively downward projection state of any of the sucking nozzles is detected. That is not the claimed invention.

Neither does Okuda disclose the claimed position sensor measuring a vertical position of a lower end of the suction nozzle after the suction nozzle releases the electronic component to the printed board and before the suction nozzle picks up the next electronic component from the component feeding unit. In contrast, Okuda discloses a transmission sensor for deciding the presence or absence of the suction nozzle based on whether the optical axis is cut off by the loaded suction nozzle 19 when the nozzle holder 16 or 17 is lowered. See Okuda at col. 6, lines 3-7. That, too, is not the claimed invention.

Finally, Kano does not disclose the claimed position sensor measuring a vertical position of a lower end of the suction nozzle after the suction nozzle releases the electronic component to the printed board and before the suction nozzle picks up the next electronic component from the component feeding unit. Rather than detecting the lower end of the suction nozzle, Kano's line sensor 27 detects the lower end of the electronic component, not the nozzle. See Kano's Fig. 14.

To anticipate a claim, the reference must teach every element of the claim. MPEP 2131. The standard for the anticipation analysis is that “[e]very element of the claimed invention must

be literally present, arranged as in the claim. . . . The identical invention must be shown in as complete detail as is contained in the patent claim.” *Richardson v. Suzuki Motor Co., Ltd.*, 868 F.2d 1226, 1236 (Fed. Cir. 1983).

Since Takeuchi, Okuda or Kano fail to teach every element of claim 1, they fail to anticipate claim 1. Thus, claim 1 is patentable over the cited references. This logic also disposes of the rejection of claims 2-6, which depend directly from claim 1.

In view of the above, each of the claims in this application is in condition for allowance. Accordingly, applicant solicits early action in the form of a Notice of Allowance.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Docket No. **606402015100**.

Respectfully submitted,

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